

# An Overview of the FAA Traffic Flow Management System

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# Traffic Management System

- Mission:
  - To balance air traffic demand with system capacity to ensure the maximum efficient use of our National Airspace System



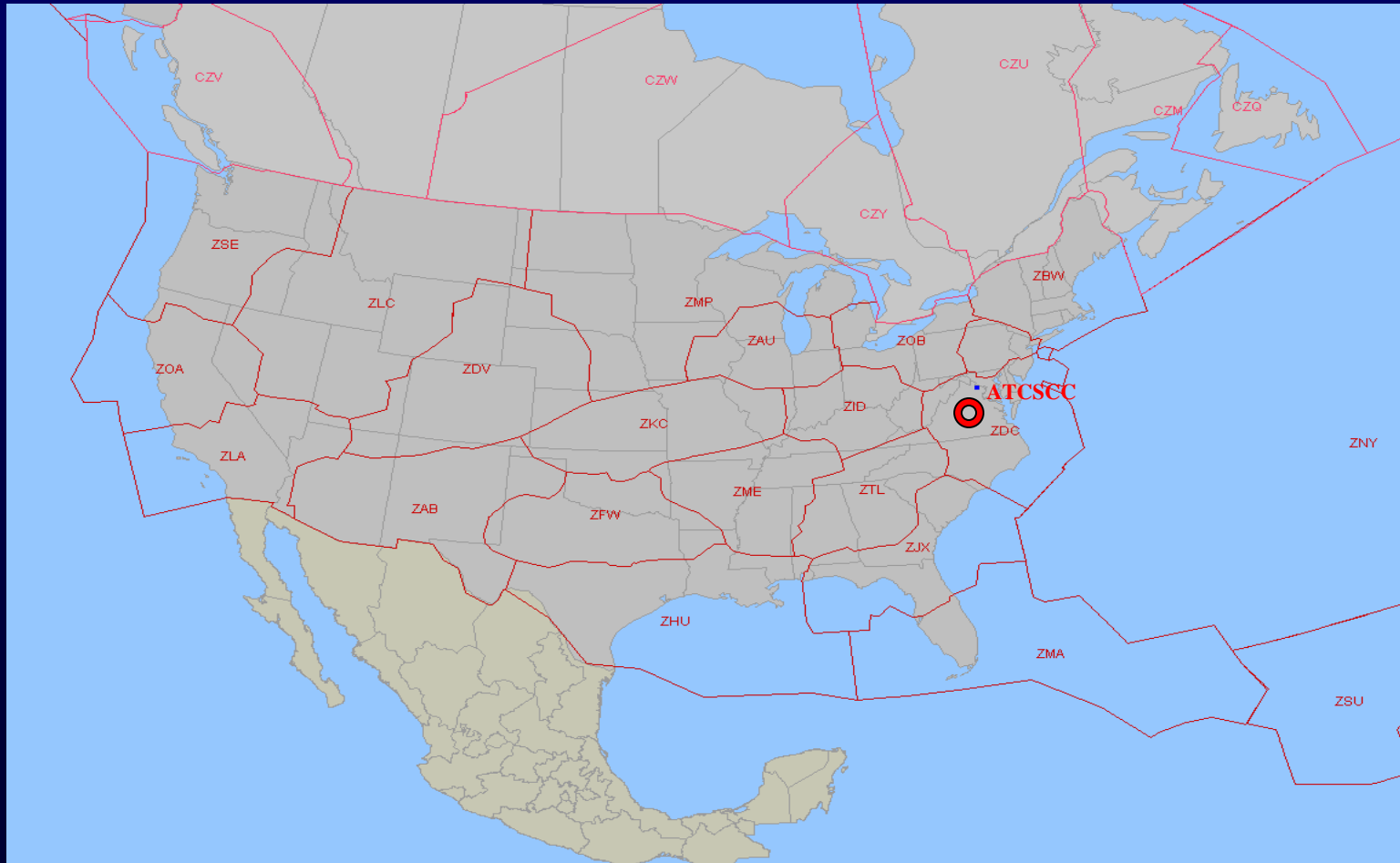
# Air Traffic Control System Command Center

- Purpose:
  - To monitor and manage the flow of air traffic throughout the nation in order to produce a safe and orderly flow of traffic while minimizing delays

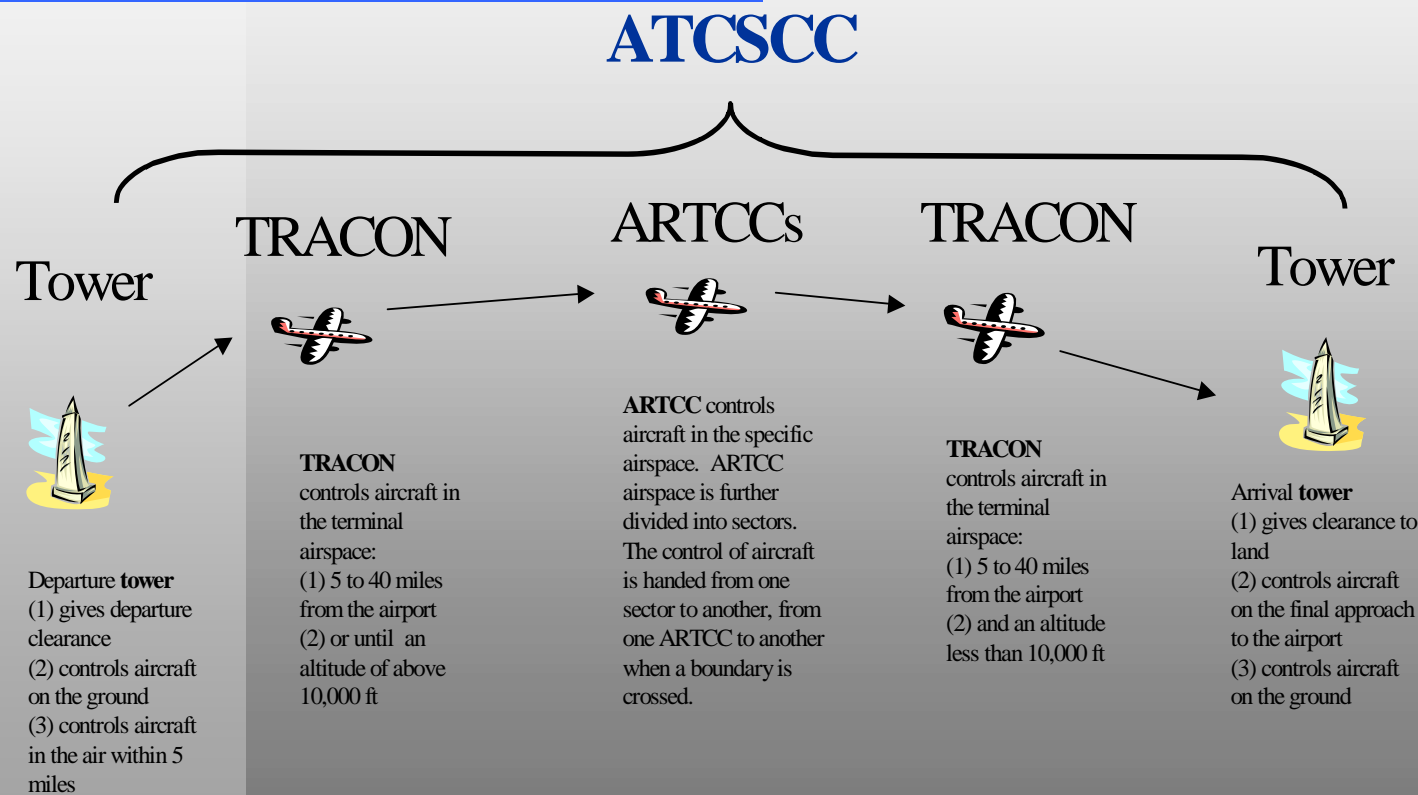


# ATFM Hierarchy

## ATCSCC - Center – Approach – Tower



# Air Traffic Flow Chart



4



ATCSCC

ARTCC  
TMU

APPROACH  
CONTROL  
TMU

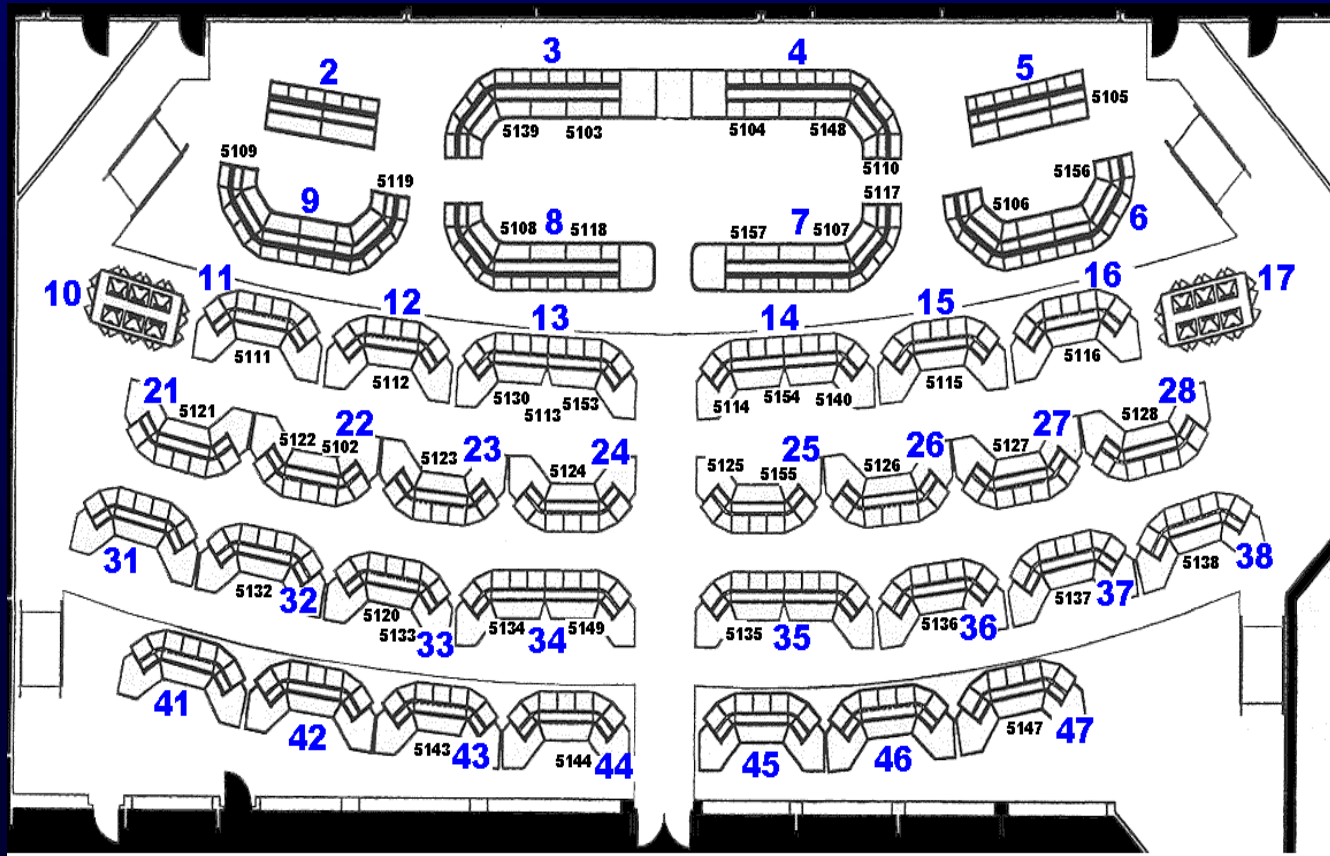
CONTROL  
TOWER  
TMU



# ATCSCC



# ATCSCC Operational Floor





# Collaborative Decision Making (CDM)



An operational philosophy and associated technologies that enable the FAA and aviation industry to respond collaboratively to real-time operational constraints in the National Airspace System.



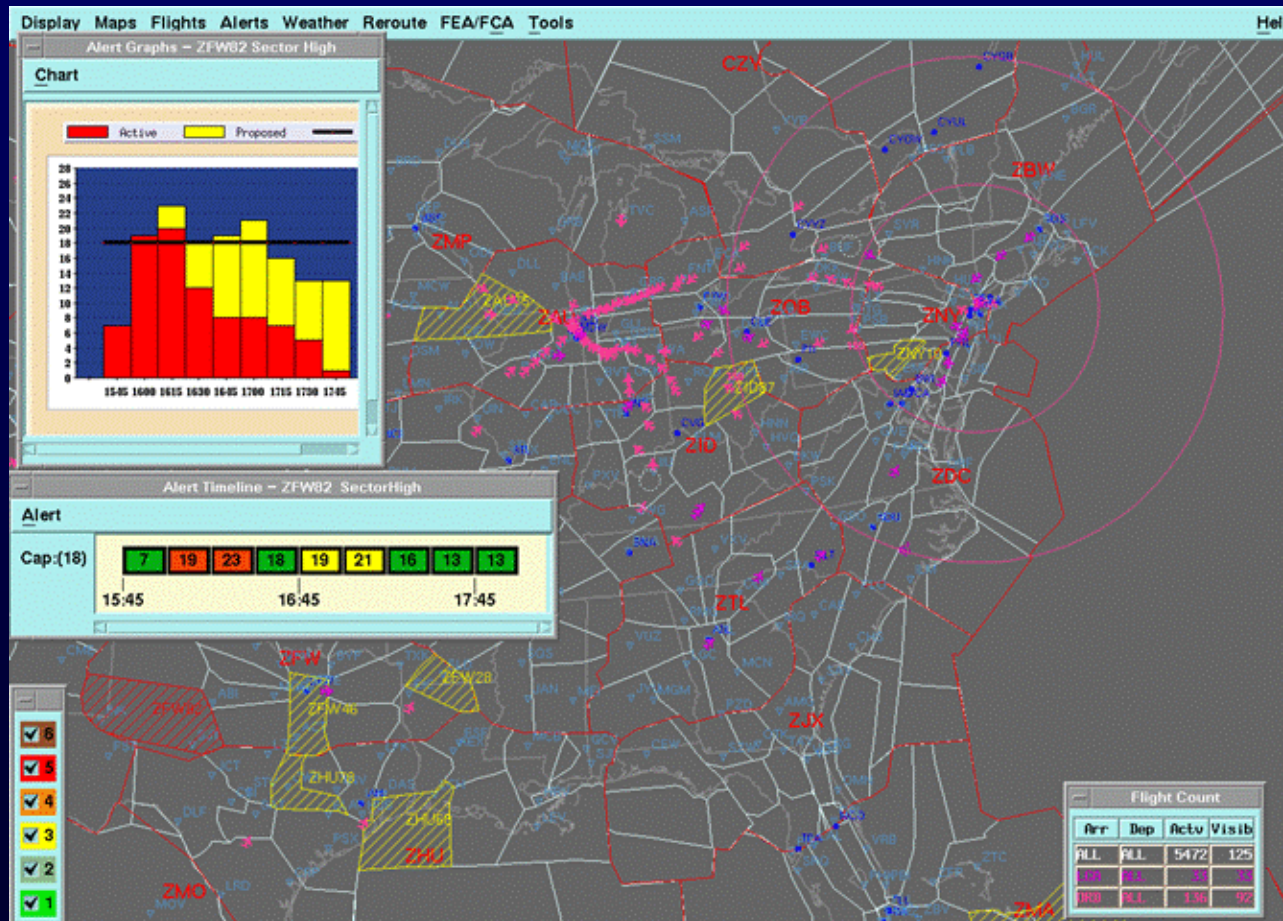
# CDM Structure

- Sponsored by Air Transport Association (ATA) to provide Industry input to the FAA
- CDM Stakeholder Group (CSG)
  - Participants: ATA, NBAA, RAA, FAA
  - Purpose: provide recommendations to the FAA on CDM priorities and activities



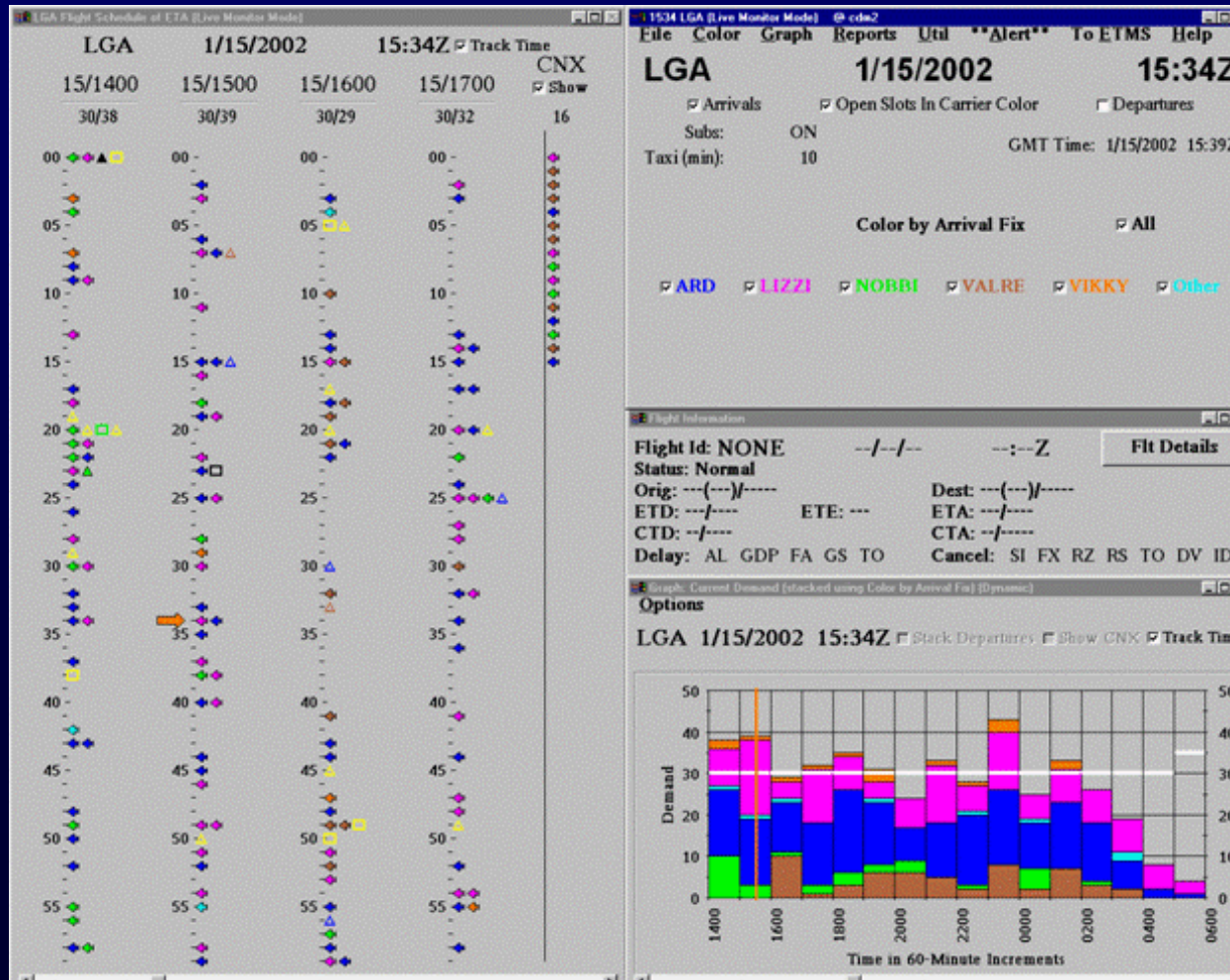
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# Enhanced Traffic Management System (ETMS)





# Flight Schedule Monitor (FSM)

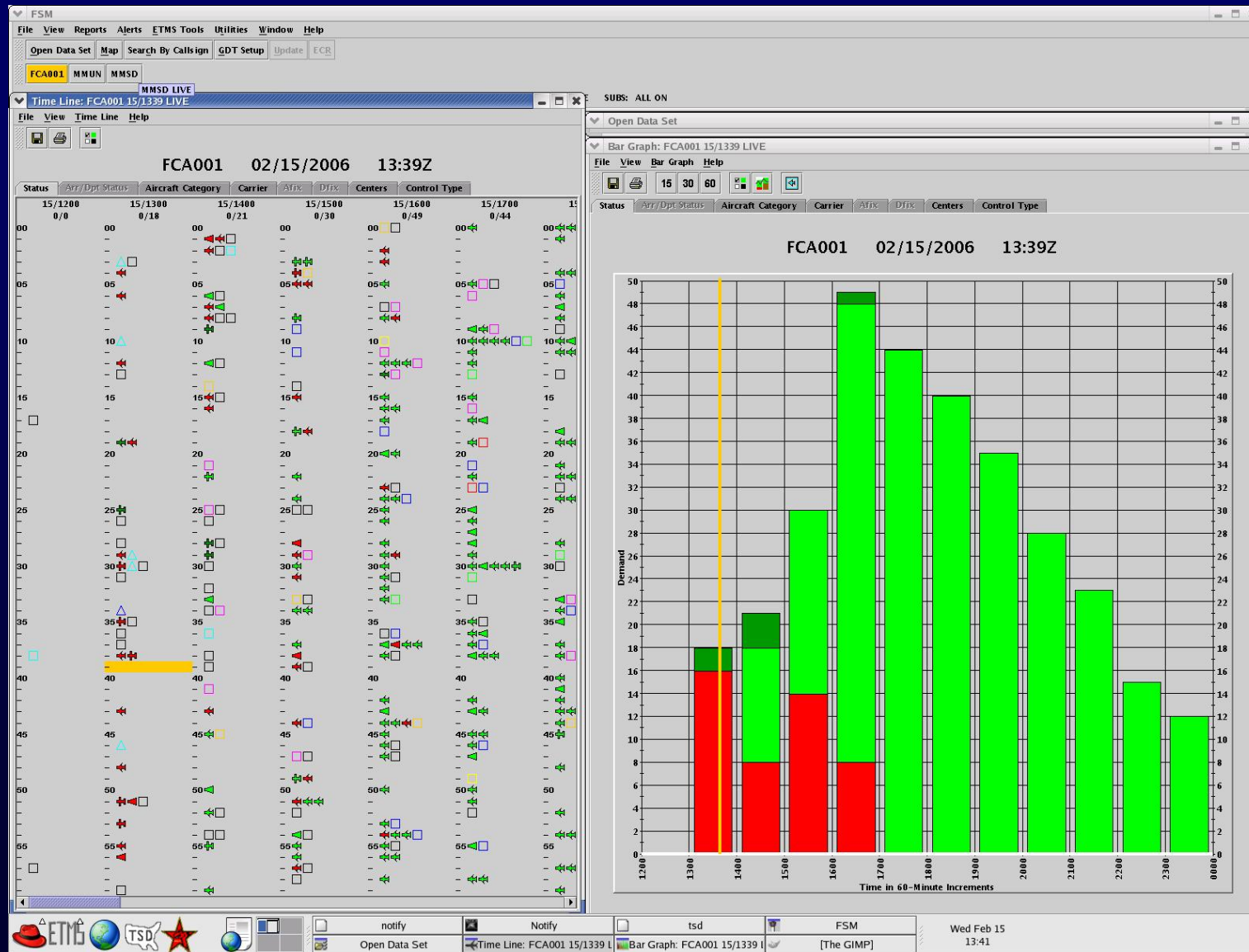






3	6	9	5	2	5	6	6	9	10	9	13	14	12	10	10	15	9	12	9	11	8	
130	1345	1400	1475	1430	1445	1500	1515	1530	1545	1600	1675	1630	1645	1700	1715	1730	1745	1800	1815	1830	1845	

# Southbound Demand



Map of the Eastern United States showing flight paths and weather data for a flight from Chicago to New York. The map highlights three areas with specific weather data:

- Area 1 (Upper Midwest, hatched):** TOPS: 370+, GWTH: -, CONF: HIGH, CVR6: 25-49%
- Area 2 (Northeast, dashed):** TOPS: 370+, GWTH: -, CONF: HIGH, CVR6: 25-49%
- Area 3 (Southeast, solid blue):** TOPS: 370+, GWTH: -, CONF: LOW, CVR6: 25-49%

The map also shows major cities and airports across the Eastern US, including HSP, FSD, MSP, BUF, IND, STL, MKE, BNA, LAX, HEN, BHM, JAX, DFW, IAD, TPA, and MIA.







## The seal of the Federal Aviation Administration (FAA) is displayed. It features a central torch superimposed on a globe, with the words "FEDERAL AVIATION ADMINISTRATION" in a circular border. The background is a blue grid with various alphanumeric codes and labels like "N", "T", "L", "S", "M", "P", "Q", "R", "S", "T", "U", "V", "W", "X", "Y", "Z" and "A", "B", "C", "D", "E", "F", "G", "H", "I", "J", "K", "L", "M", "N", "O", "P", "Q", "R", "S", "T", "U", "V", "W", "X", "Y", "Z".

National PlayBook Menu  
☐ [PlayBook](#)  
Change for Jul 7, 2005  
☐ Airports

ARTL	ERLIN-RMG
ATL	HOMIE-LGC
BOS	ORW
BOS	ORW-SCUPP
CVG	CINCE 1
CVG	CINCE 2
CVG	EAST
CVG	MOSEY
CVG	SWEED 1
CVG	SWEED 2
CVG	TARNE
DEN	OBH
DEN	ONL
DFW	BYP 1
DFW	BYP 2
DFW	COY
DFW	EAST 1
DFW	EAST 2
DFW	JEN
DFW	UK W
DFW	WEST
DTW	CETUS
DTW	EAST
DTW	MIZAR
DTW	SPICA
IAD	MULRR 1
IAD	MULRR 2
IAD	MULRR 3

## A dramatic photograph of a lightning bolt striking a dark, silty structure, possibly a dam or bridge, under a dark, stormy sky. The lightning bolt is bright and jagged, illuminating the structure it strikes. The sky is dark with some lighter, wispy clouds. The overall mood is intense and powerful.

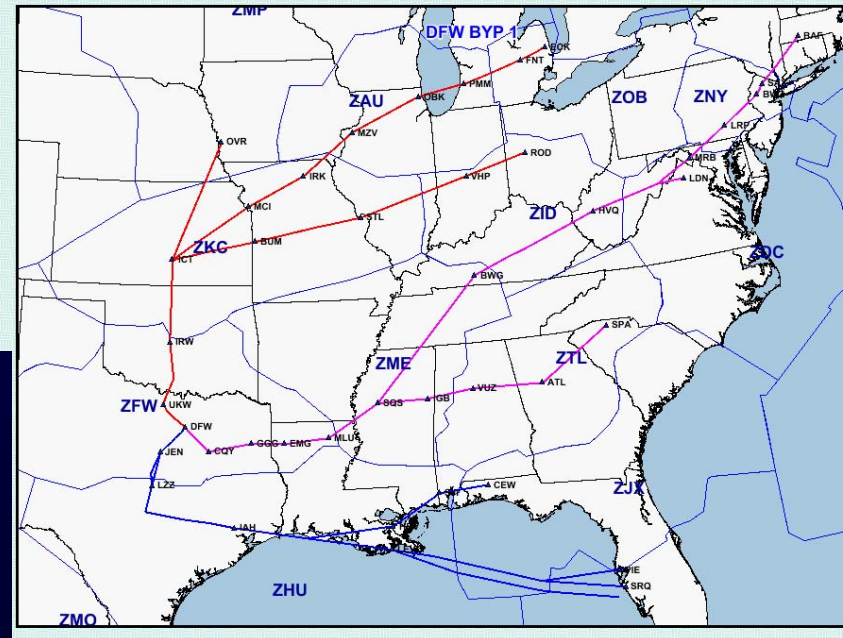
# DFW BYP 1

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**Impacted Area or Flow:** DFW BYP STAR

**Facilities Included:** ZFW/ZME/ZID/ZDC/ZNY/ZBW/CZY/ZTL/ZHU/ZJK/ZMA/ZKC/ZAU/ZOB/ZMP

**Instructions:** REROUTE ANY AIRBORNE TRAFFIC AND INTERNAL DEPARTURES DESTINED THE DFW TERMINAL AREA VIA THE FOLLOWING ROUTES. SUBSTITUTE OTHER DESTINATION IN PLACE OF DFW IF APPLICABLE





# National Playbook

- Original concept: summer 1999
- First use: spring 2000
- Purpose: to enhance communication and promote a common situational awareness between the Command Center, FAA field facilities, and customer community



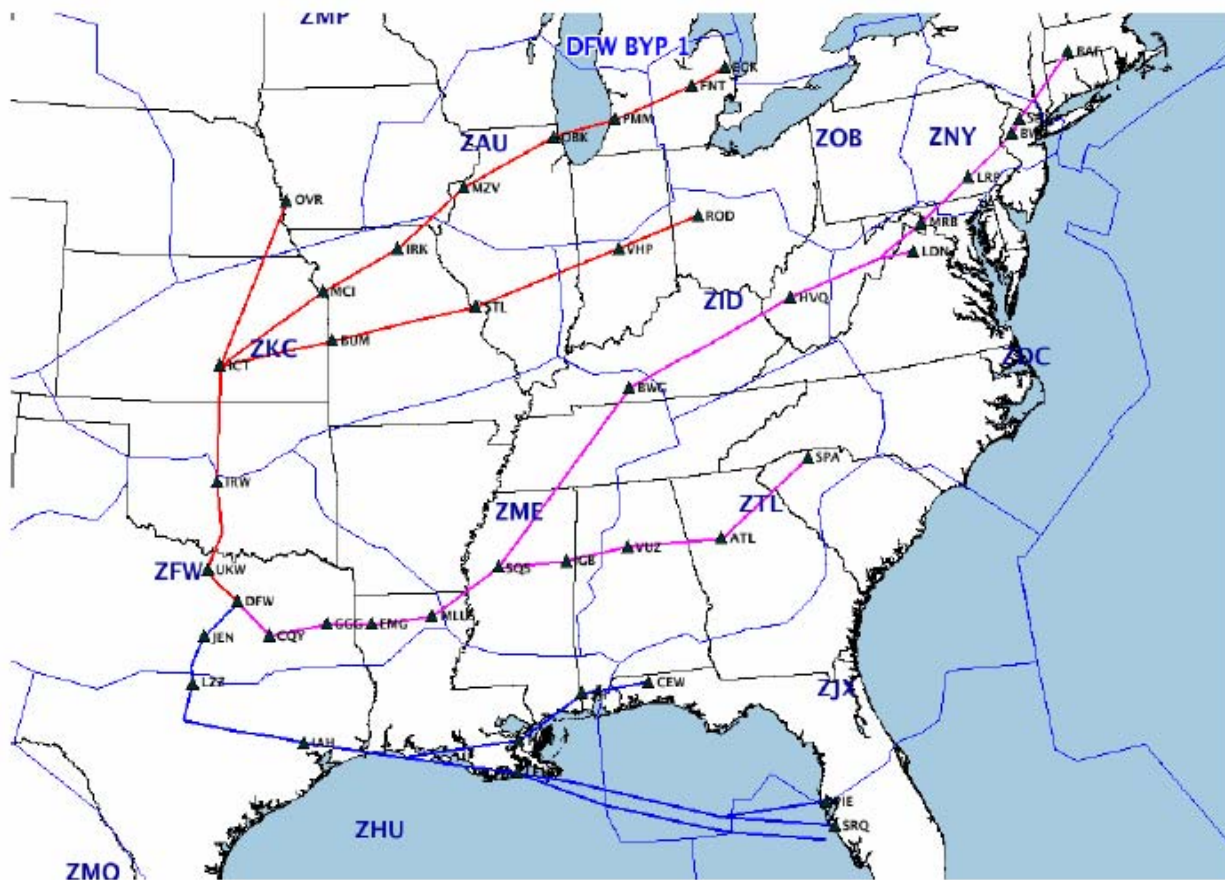
# Structure: 140 “Plays” (pre-coordinated routes)

- 67 Airport Plays
- 16 Airway Closure Plays
- 20 East-to-West Transcon Plays
- 12 Regional Route Plays
- 25 West-to-East Transcon Plays



# EXAMPLE: DFW ARRIVALS

GRAPHIC: DFW BYP 1





# Coded Departure Routes (CDRs)

**RMT 1.1**  
Program Settings Modifications Reports Window Help

☐ CDR Tool

EFFECTIVE 09012: 27 Dec 2001  
TO 09012: 21 Feb 2002

**Query Fields: Operational**

Route Code:  Origin/Dep Center:  Destination/Arr Center:  Departure Fix:  Date/Time:

Route String:  Remarks:  Modflag:

**Database**  
☒ Operational  
☐ Staging

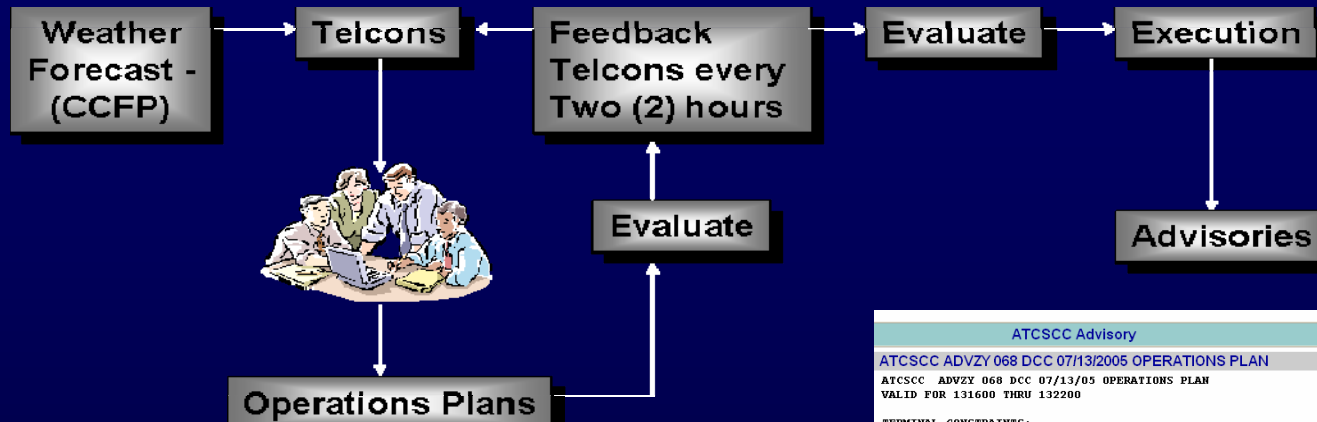
**Query Results: Operational**

Time	RCode	Orig	Dest	Route String	DepFix	DCNTR	ACNTR	Modflag	Remarks
2001-12-27 11:50:29	EWROFW06	KEWR	KDFW	KEWR COATE J36 WAAKE J29 PIX J131 LIT BYP4 KDFW	COATE	ZNY	ZFW	-	
2001-12-27 11:50:28	EWROFW48	KEWR	KDFW	KEWR LANNA J48 MOL J22 VAV J46 BNA J46 J6 LIT BYP4 KDFW	LANNA	ZNY	ZFW	-	
2001-12-27 11:50:28	EWROFW60	KEWR	KDFW	KEWR ELIOT J80 DJB J29 PIX J131 LIT BYP4 KDFW	ELIOT	ZNY	ZFW	-	
2001-12-27 11:50:28	EWROFW64	KEWR	KDFW	KEWR ELIOT ETX RAV J84 J29 PIX J131 LIT BYP4 KDFW	ELIOT	ZNY	ZFW	-	
2001-12-27 11:50:28	EWROFW70	KEWR	KDFW	KEWR D06E V276 PREPI OWENZ LINND BETNY KATHY A700 CARPS AR5 J	D06E	ZNY	ZFW	-	
2001-12-27 11:50:26	EWROFW75	KEWR	KDFW	KEWR BIGGY J75 O80 J14 VUZ J52 SQS CQY5 KDFW	BIGGY	ZNY	ZFW	-	
2001-12-27 11:50:26	EWROFW80	KEWR	KDFW	KEWR ELIOT J80 FYLLS J29 PIX J131 LIT BYP4 KDFW	ELIOT	ZNY	ZFW	-	
2001-12-27 11:50:26	EWROFW86	KEWR	KDFW	KEWR BIGGY J75 OVE J37 SPA J14 VUZ J14 LIT BYP4 KDFW	BIGGY	ZNY	ZFW	-	
2001-12-27 11:50:25	EWROFW87	KEWR	KDFW	KEWR PARKE J6 COLNS J134 STL RZC FSM BYP4 KDFW	PARKE	ZNY	ZFW	-	
2001-12-27 11:50:25	EWROFW89	KEWR	KDFW	KEWR WHITE J209 ORF J174 ILM J4 CAE J52 ATL J14 LIT BYP4 KDFW	WHITE	ZNY	ZFW	-	
2001-12-27 11:50:25	EWROFWCA	KEWR	KDFW	KEWR GREK V419 JUDDS CAM J547 SYR J29 PIX J131 LIT BYP4 KDFW	GREK	ZNY	ZFW	-	
2001-12-27 11:50:24	EWROFWCH	KEWR	KDFW	KEWR WHITE J209 ORF J174 CHS J40 MOM J4 JAN ELD TXK BYP4 KDFW	WHITE	ZNY	ZFW	-	
2001-12-27 11:50:24	EWROFWJ5	KEWR	KDFW	KEWR PARKE J6 BWG SQS AEX LFK CWK LZZ JEN JEN6 KDFW	PARKE	ZNY	ZFW	-	
2001-12-27 11:50:23	EWROFWJ6	KEWR	KDFW	KEWR PARKE J6 BWG ARO FSM BYP4 KDFW	PARKE	ZNY	ZFW	-	
2001-12-27 11:50:23	EWROFWJ8	KEWR	KDFW	KEWR WHITE J209 ORF J174 ILM J4 CAE J52 SQS AEX LFK CWK LZZ JEN J	WHITE	ZNY	ZFW	-	
2001-12-27 11:50:23	EWROFWJ9	KEWR	KDFW	KEWR WHITE J209 ORF J174 CHS J40 MOM J590 LCH J2 IAH CWK LZZ JE	WHITE	ZNY	ZFW	-	
2001-12-27 11:50:22	EWROFWKA	KEWR	KDFW	KEWR WHITE J209 SBY J79 KATZN J193 WEAVER J131 ISO FLO CAE J52 TX	WHITE	ZNY	ZFW	-	
2001-12-27 11:50:22	EWROFWLM	KEWR	KDFW	KEWR WHITE J209 ORF J174 ILM J4 CAE J52 TXK BYP4 KDFW	WHITE	ZNY	ZFW	-	
2001-12-27 11:50:22	EWROFWPH	KEWR	KDFW	KEWR PARKE J6 LIT BYP4 KDFW	PARKE	ZNY	ZFW	-	
2001-12-27 11:50:21	EWROFWQ5	KEWR	KDFW	KEWR LANNA J48 MOL J22 VUZ J52 SQS CQY5 KDFW	LANNA	ZNY	ZFW	-	
2001-12-27 11:50:21	EWROFWQ6	KEWR	KDFW	KEWR PARKE J6 BWG SQS CQY5 KDFW	PARKE	ZNY	ZFW	-	
2001-12-27 11:50:21	EWROFWQ7	KEWR	KDFW	KEWR ELIOT J80 DJB J29 ROD J39 IU BWG SQS CQY5 KDFW	ELIOT	ZNY	ZFW	-	
2001-12-27 11:50:21	EWROFWU6	KEWR	KDFW	KEWR ELIOT J80 JOT MZV IRK J26 ICT IRW UKW7 KDFW	ELIOT	ZNY	ZFW	-	
2001-12-27 11:50:20	EWROFWU8	KEWR	KDFW	KEWR ELIOT J80 VHP J24 STL J19 ICT IRW UKW7 KDFW	ELIOT	ZNY	ZFW	-	
2001-12-27 11:42:46	HPNDFW36	KHPN	KDFW	KHPN COATE J36 WAAKE J29 PIX J131 LIT BYP4 KDFW	COATE	ZNY	ZFW	-	
2001-12-27 11:42:45	HPNDFW48	KHPN	KDFW	KHPN LANNA J48 MOL J22 VAV J46 BNA J46 J6 LIT BYP4 KDFW	LANNA	ZNY	ZFW	-	
2001-12-27 11:42:44	HPNDFW60	KHPN	KDFW	KHPN ELIOT J80 DJB J29 PIX J131 LIT BYP4 KDFW	ELIOT	ZNY	ZFW	-	
2001-12-27 11:42:44	HPNDFW64	KHPN	KDFW	KHPN ELIOT ETX RAV J84 J29 PIX J131 LIT BYP4 KDFW	ELIOT	ZNY	ZFW	-	
2001-12-27 11:42:43	HPNDFW75	KHPN	KDFW	KHPN BIGGY J75 O80 J14 VUZ J52 SQS CQY5 KDFW	BIGGY	ZNY	ZFW	-	
2001-12-27 11:42:42	HPNDFW80	KHPN	KDFW	KHPN ELIOT J80 FYLLS J29 PIX J131 LIT BYP4 KDFW	ELIOT	ZNY	ZFW	-	
2001-12-27 11:42:41	HPNDFW86	KHPN	KDFW	KHPN BIGGY J75 OVE J37 SPA J14 VUZ J14 LIT BYP4 KDFW	BIGGY	ZNY	ZFW	-	
2001-12-27 11:42:41	HPNDFW87	KHPN	KDFW	KHPN PARKE J6 COLNS J134 STL RZC FSM BYP4 KDFW	PARKE	ZNY	ZFW	-	
2001-12-27 11:42:41	HPNDFW89	KHPN	KDFW	KHPN WHITE J209 ORF J174 ILM J4 CAE J52 ATL J14 LIT BYP4 KDFW	WHITE	ZNY	ZFW	-	
2001-12-27 11:42:41	HPNDFWCA	KHPN	KDFW	KHPN GREK V419 JUDDS CAM J547 SYR J29 PIX J131 LIT BYP4 KDFW	GREK	ZNY	ZFW	-	
2001-12-27 11:42:38	HPNDFWCH	KHPN	KDFW	KHPN WHITE J209 ORF J174 CHS J40 MOM J4 JAN ELD TXK BYP4 KDFW	WHITE	ZNY	ZFW	-	
2001-12-27 11:42:37	HPNDFWJ5	KHPN	KDFW	KHPN PARKE J6 BWG SQS AEX LFK CWK LZZ JEN JEN6 KDFW	PARKE	ZNY	ZFW	-	
2001-12-27 11:42:36	HPNDFWJ6	KHPN	KDFW	KHPN PARKE J6 BWG ARO FSM BYP4 KDFW	PARKE	ZNY	ZFW	-	

1-138 / 138 records



# Planning Process



**ATCSCC Advisory**

**ATCSCC ADVZY 068 DCC 07/13/2005 OPERATIONS PLAN**  
 ATCSCC ADVZY 068 DCC 07/13/05 OPERATIONS PLAN  
 VALID FOR 131600 THRU 132200

**TERMINAL CONSTRAINTS:**  
 NY METROS/PHL/DC METROS/ATL/PHL/CVG-LOCIGS  
 IAD-TAXIWAY CONSTRUCTION  
 DC METROS/PIT/CLE/DTW/ATL/MCO/IAH/DFW-TSTMS  
 LAS-1R/19L RWY CONSTRUCTION  
 LAX-LOCIGS/VSBY

**ENROUTE CONSTRAINTS:**  
 ZBW/ZNY/ZDC/ZJX/ZHA/ZTL/ZME/ZFW/ZHU/ZLC/ZAB-TSTMS  
 A761-TSTMS  
 R763-CLSD TILL 1900 DUE TO TSTMS  
 ZJX/ZHA-SPACE SHUTTLE LAUNCH

- 1. ROUTES**  
 1800-0000 -CHOKEPOINT ROUTES TO EWR/JFK (FCA)  
 AFTER 1800 -SHOWBIRD 6 PLAYBOOK ROUTES PSBL  
 AFTER 1600 -NRP SUSPENDED VIA J29 ZFW/ZHU/ZME TO NORTHEAST  
 AFTER 1700 -POSSIBLE PLAYBOOK ROUTES, INCLUDING HGM AND/OR  
 CANADIAN ROUTES TO THE NORTHEAST POSSIBLE
- 2. ZNY**  
 UNTIL 0300 -LGA/EWR/PHL GROUND DELAY PROGRAMS  
 UNTIL 0200 -NY METROS/PHL CDRS/SWAP, GROUND STOPS PSBL  
 AFTER 1700 -JFK GROUND DELAY PROGRAM PSBL  
 UNTIL 0000 -TEB GAAP GROUND DELAY PROGRAM EXPECTED
- 3. ZOB**  
 AFTER 1900 -DTW/CLE/PIT CDRS/SWAP, TACTICAL REROUTES, CAPPING/  
 TUNNELING, GROUND STOPS PSBL
- 4. ZTL**  
 UNTIL 0400 -ATL GROUND DELAY PROGRAM  
 UNTIL 0000 -ATL CDRS/SWAP, GROUND STOPS PROBABLE  
 AFTER 1800 -CLT CDRS/SWAP, TACTICAL REROUTES
- 5. ZJX/ZHA**  
 UNTIL 2300 -TACTICAL REROUTES, CAPPING/TUNNELING

\*\*\* SUBMIT NEW OPERATIONS PLAN AGENDA ITEMS VIA OIS PAGE \*\*\*

NEXT PLANNING TELCON: 131715Z  
 PARTICIPATION REQUIRED BY: ALL CENTERS/H90  
 131545-131759  
 05/07/13 15:45 FSA.//lxstn08a





# International Operations and Collaboration

## ➤ ETMS Agreements

- Canada
- United Kingdom
- Mexico
- Chile
- Colombia, COCESNA, Panama, Dominican Republic, Trinidad & Tobago
- Future (Japan, Eurocontrol, Brazil)



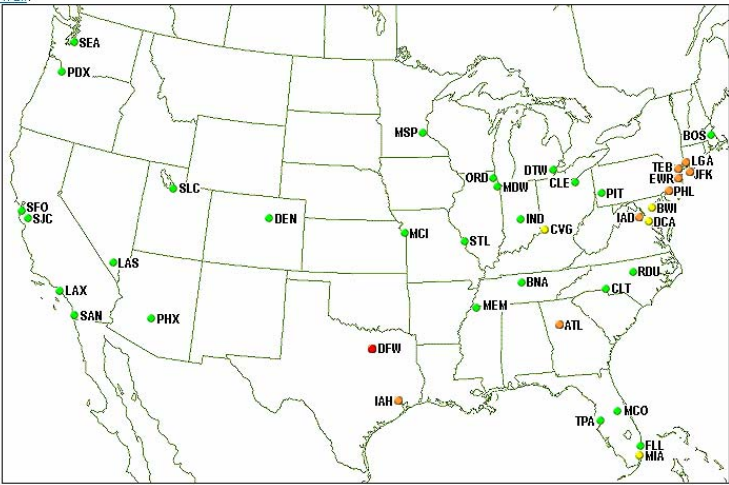
# ATCSCC Web Site

The Federal Aviation Administration

**Air Traffic Control System Command Center**

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Welcome to the [ATCSCC](#) Real-time Airport Status page. ([Text-only version](#)). If your airport of interest is not shown, you can zoom in to the [Northwestern States](#), the [North Central States](#), the [Northeastern States](#), the [Southwestern States](#), the [South Central States](#), the [Southeastern States](#), or [Alaska and Hawaii](#).



The status information provided on this site indicates general airport conditions; it is not flight-specific. [Check with your airline](#) to determine if your flight is affected. Information on [wait times at security checkpoints](#).

**Legend**

● General Arrival/Departure delays are 15 minutes or less.	● Departures are experiencing taxi delays greater than 45 minutes and/or arrivals are experiencing airborne holding delays greater than 45 minutes.
● Departures are experiencing taxi delays of 16 to 45 minutes and/or arrivals are experiencing airborne holding delays of 16 to 45 minutes.	● Traffic destined to this airport is being delayed at its departure point. Check your departure airport to see if your flight may be affected.
● Closed airport	

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